

GEORGIU

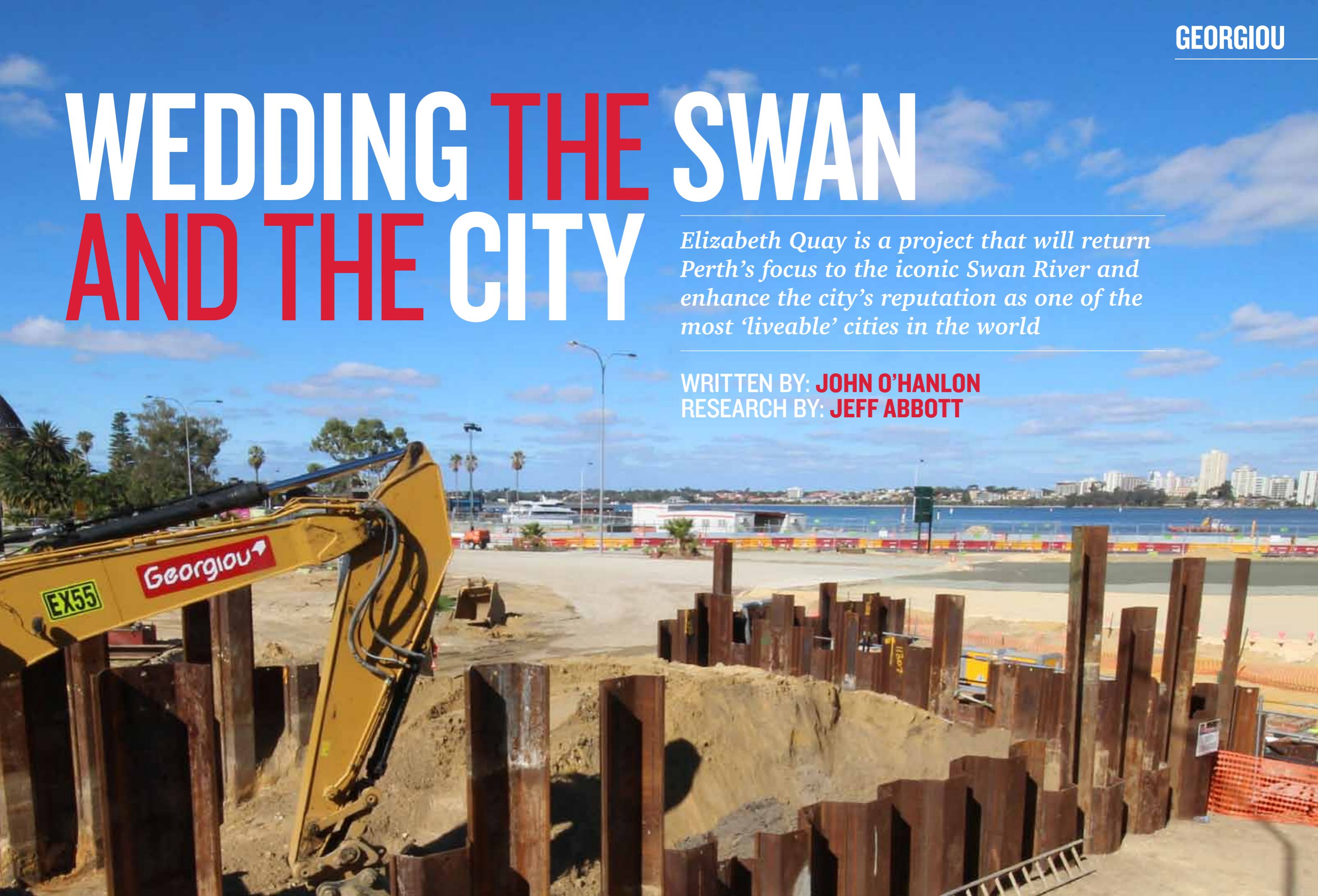
WEDDING THE SWAN AND THE CITY



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Elizabeth Quay is a project that will return Perth's focus to the iconic Swan River and enhance the city's reputation as one of the most 'liveable' cities in the world

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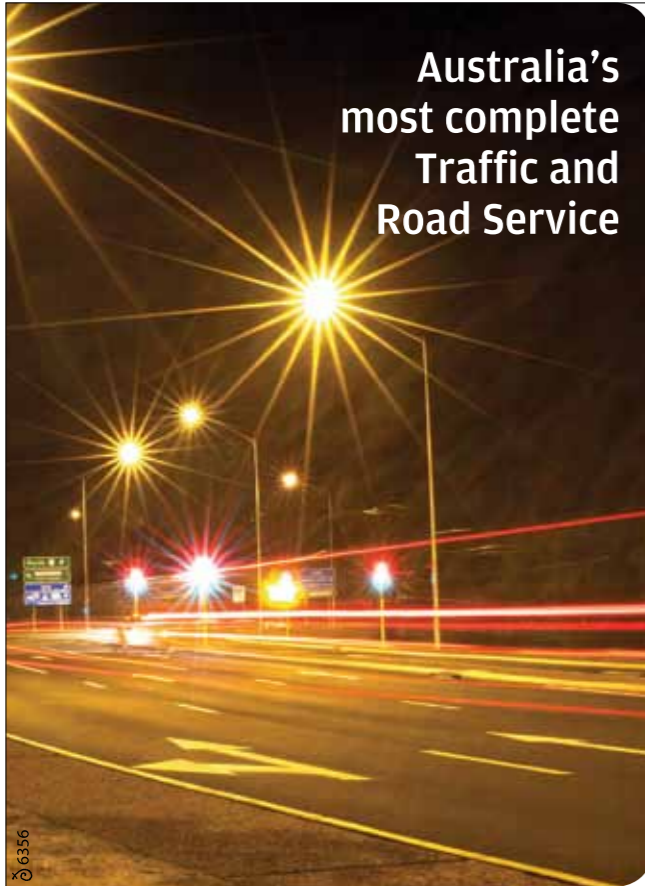


Complex traffic management was required around Riverside Drive

The Perth waterfront has been an under-used asset, but now Western Australia’s capital city is finally making the most of it with the \$2.6billion Elizabeth Quay project covering nearly ten hectares of prime riverfront land between Barrack and William streets in the heart of the city. The project will create a magnificent precinct featuring a newly dug 2.7 hectare inlet surrounded by a split level promenade, shops, cafés, restaurants and other exciting entertainment venues.

Additionally the project will help secure Western Australia’s social and economic future. Elizabeth Quay is providing an estimated 1,600 direct and indirect jobs for the local economy during construction and is expected to attract \$2.2billion in private sector investment. Perth’s citizens and visitors will be able to enjoy the transformation by the middle of 2015. At the moment it is a work in progress, though a critical phase, the key \$60 million forward works contract that was awarded by the Metropolitan Redevelopment Authority (MRA) to Georgiou Group in April 2012 is nearing completion.

The contract covered site remediation; construction of a new bus entry into the Esplanade Busport; creation of a new citybound link between the Point Lewis Rotary (under the Narrows Bridge) and William Street to provide an alternative route into the CBD from the west; and closure and full reconstruction of William Street (south of The Esplanade) as a two-way street. Once all that is complete the way will be open for the building construction and the creation of the inlet.



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The forward contract is so complex that it needed a company with solid experience in service relocation and realignment, something Georgiou has built up over the decades. “Your track record counts for a lot in our business,” says Tony Ricciardello, Group Project Manager. However no two projects are alike, and apart from being a big one even for Georgiou there were a whole host of unique challenges to be faced.

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The biggest was the need to be working in the centre of Perth without disrupting daily life too much. “Traffic, pedestrians, cycles all circulating around us need sensitive management, and we have a dedicated relationships manager for the project to liaise with the MRA, whose job it is to communicate day to day impacts to the public.” Riverside Drive is one of Perth’s main thoroughfares. It has traffic volumes of 35-40,000 vehicles a day so Georgiou had the task of addressing the different kinds of safety hazards faced by the public and its own employees.

Groundwater has been an ever present fact of life, he continues, since the work has been carried out so close to the river. In addition, the waterfront area is built on land reclaimed



Early works on the main drain



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as long ago as the 19th century. Much of the land between the Perth business district, and the Swan River shoreline has been reclaimed. From the 1870s right up to the 1960s various projects have increased the available foreshore land. Even the historic site of the Perth CBD had to be improved, as the surface was a rather sandy and marshy river terrace. This made it unsuitable for building foundations, and the market gardening activities of the early settlers. Even today many buildings have below ground pumps to divert spring water.

In those days civil engineers were not so fussy about the material they used as landfill, which made assessing the existing services unpredictable. “The old records are not very reliable,” says Ricciardello. “We located literally hundreds of unknown services, and that has been a challenge.” Early in the project, Georgiou instigated a process to locate and map as many of these services as possible, using modern techniques such a ground penetrating radar, but still many pipes and conduits turned out not quite to be in the expected position. By meticulous recording and reporting Georgiou has been able to help its clients prepare a definitive map of underground networks in this part of Perth.

One of the biggest challenges and, now it is behind him, the biggest achievements of the project was the realignment of the Perth Main Drain. This consists of two 1,950 mm

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(Georgiou) Construction Manager, Tony Ricciardello on site



Linemarker preparing major road diversion

concrete storm water pipes that discharge into the Swan River. “It actually runs through the middle of our construction site, and would have run across the proposed inlet,” he explains. “As a result it had to be realigned down the middle of an existing road, William Street, across Riverside Drive and then to the outfalls in the river.”

The reconstruction of the main drain was very much at the heart of the critical path of the project, and completing that work in August 2013 was a major milestone. It was done in

three significant stages. The first was to take the drain from the outfall to Riverside Drive: “We needed to get that completed so we could divert Riverside Drive traffic over the completed drain.”

The next stage was crossing Riverside Drive and the third to follow the line of William Street and connect the re-routed drain to the original pipes. At this point Ricciardello had occasion to bless the original designers of the Main Drain – the twin drains made it possible to isolate one pipe at a time. “That operation to complete the connections took about three

and a half weeks. That was far and away our biggest achievement,” he says.

Georgiou will have withdrawn from the site by early November, leaving the way clear for the next contractors the Leighton Broad partnership to complete the inlet and construction work. “We have been on site for nearly 18 months,” says Tony Ricciardello with satisfaction. “It has been a significant achievement for the company, a high profile, high value project. Now we are looking forward to our next challenge!”

With a healthy order book, Georgiou’s

professionals will have no lack of work to do. But they and the subcontractors involved brought in to do specialised work like power installation, welding, fabrication and concrete forming, most of them long associated with Georgiou, will never be able to walk through the centre of Perth without thinking “I did this!” **BE**

For more information about Georgiou visit: www.georgiou.com.au



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